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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,847	10/22/2003	Wolfgang Eberle	028987.52849US	4219
23911	7590	09/10/2004	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			CHANG, CHING	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/689,847	Applicant(s) EBERLE ET AL.	
	Examiner Ching Chang	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 2-3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/23/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 2-3 are objected to because of the following informalities:
 - " the reduction gear ", and " the other " in claim 2 appear to be -- a reduction gear --, and -- the other hand -- respectively.
 - " the crankcase " in claim 3 appears to be -- a crankcase --.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. ***Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.***

More specifically, " especially " renders the claimed subject matter in claims 1-6 indefinite.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4-5, 7-10, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehmann (US Patent 6,526,929) in view of Sieber et al (US Patent 6,332,437), and further in view of Nakamura et al. (US Patent 6,260,523).

Lehmann discloses an adjusting device (See Fig. 1) for two subassemblies (1, 2) standing in rotary drive connection, for the adjustment of a camshaft (1) relative to the drive wheel (2) that drives it, with a control gear (3) arranged between the two that is drivable via an electrically commutated electric motor (16, 17) for adjustment, wherein the control gear (a worm type gear) is self-inhibiting with a high internal friction (as taught by Sieber), and the rotor (16) of the commutator motor is connected to the entry of a reduction gear (9, 13, 15), wherein this reduction gear is connected to the camshaft on the one hand and to the drive wheel of the camshaft on the other hand, wherein said adjusting device is used for adjustment of a camshaft (1) relative to a drive wheel (2) driving a camshaft.

Lehmann further discloses the motor is attached to a casing part (18) of the engine.

Lehmann discloses the invention as recited above, however, fails to disclose the motor being a direct current motor.

The patent to Nakamura on the other hand, teaches that it is conventional in art of an engine valve actuation apparatus, to have utilized a direct current electric motor (134) in an engine valve actuation apparatus (See Fig. 13).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the direct current electric motor as taught by Nakamura in the Lehmann device, since the use thereof would provide an improved adjusting device for an engine valve actuation apparatus.

6. ***Claims 3, 6, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehmann in view of Sieber, further in view of Nakamura (as applied to claims 1, 4, and 7 above), and further in view of Egelund et al. (WO '630).***

The modified Lehmann discloses the invention, however, fails to disclose the motor being fastened on a crankcase.

The patent to Egelund on the other hand, teaches that it is conventional in the art of air compressor, to have utilized a DC motor (6) mounted to a crankcase (4) to drive a conventional piston compressor (16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the configuration of mounting the DC motor to a crankcase as taught by Egelund in the modified Lehmann device, since the use thereof would provide an more compact adjusting device for an engine valve actuation apparatus.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (703)306-3478. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

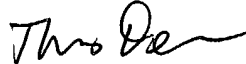
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703)308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner


Ching Chang


THOMAS DENION
SUPERVISORY PATENT EXAMINER
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